BY ORDER OF THE SECRETARY OF THE AIR FORCE

AIR FORCE INSTRUCTION 11-2HC-130, VOLUME 3, ADDENDA A

19 APRIL 2001

Flying Operations

HC/MC-130 OPERATION CONFIGURATION/ MISSION PLANNING

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

OPR: HQ ACC/DOTO (Maj Jed Hudson)

Certified by: HQ USAF/XOO (Maj Gen Walter E. Buchanan III)

Supersedes MCI 11-258, 21 Mar 97

Pages: 40

Distribution: F

This volume implements AFPD 11-2, *Aircraft Rules and Procedures* and AFPD 11-4, *Aviation Service.* It applies to Rescue HC/MC-130 units and their assigned Backup Aircraft Inventory (BAI) aircraft. MAJCOMs/DRUs/FOAs will forward proposed MAJCOM/DRU/FOA-level supplements to this volume to HQ USAF/XOF, through HQ ACC/DOT, for approval prior to publication IAW AFPD 11-2. Copies of MAJCOM/DRU/FOA-level supplements, after approved and published, will be provided by the issuing MAJCOM/DRU/FOA to HQ USAF/XOF, HQ ACC/DOT, and the user MAJCOM/DRU/FOA offices of primary responsibility. Field units below MAJCOM/DRU/FOA level will forward copies of their supplements to this publication to their parent MAJCOM/DRU/FOA office of primary responsibility for post publication review.

NOTE: The terms Direct Reporting Unit (DRU) and Field Operating Agency (FOA) as used in this paragraph refer only to those DRUs/FOAs that report directly to HQ USAF. Keep supplements current by complying with AFI 33-360V1, *Publications Management Program*. See paragraph **1.7.** of this volume for guidance on submitting comments and suggesting improvements to this publication.

The Privacy Act of 1974 affects this instruction. The Privacy Act System Number F011 AF XO A, Air Force Operations Resource Management Systems (AFORMS) covers required information. The authority for maintenance of the system is 37 U.S.C. 301a (Incentive Pay), Public Law 92-204, Section 715 (Appropriations Act for 1973), Public Laws 93-570 (Appropriation Act for 1974), 93-294 (Aviation Career Incentive Act of 1974), DoDD 7730.57 (Aviation Career Incentive Act and Required Annual Report, 5 February 1976, with changes 1 and 2); and Executive Order 9497.

The Paperwork Reduction Act of 1974 as amended in 1996 affects this volume. Records Management: maintain and dispose of records created as a result of processes prescribed in this publication in accordance with AFMAN 37-139, *Records Disposition Schedule.*

Chapter 1—GENERAL INFORMATION **Pg**

Chapter 2--CONSOLIDATED EQUIPMENT TABLES

Chapter 3—CARGO COMPARTMENT CONFIGURATIONS

Chapter 4--REFERENCE DATA

Chapter 5--DD FORM 365-4 INSTRUCTIONS

FIGURES

TABLES

Chapter 1

GENERAL INFORMATION

1.1. General. This instruction establishes basic cargo compartment configuration, standard equipment, and it's location aboard Rescue HC-130P/N and MC-130P aircraft. Those using this instruction should be aware of the infinite number of available variations and that the cargo compartment limitations listed herein are the most typical encountered in day-to-day operations. Some HC/MC-130 aircraft have additional equipment installed, which may affect configuring the aircraft as listed. This instruction applies to all units charged with configuring and operating Rescue HC-130P/N and MC-130P aircraft.

1.2. Responsibilities. Personnel engaged in planning operations must consider the most appropriate configuration that satisfies mission requirements and permits the minimum variations and man-hours involved. Units performing services on the HC/MC-130 aircraft (i.e., maintenance, life support) are responsible for configuring the aircraft IAW this instruction and as outlined in mission directives.

1.3. Configuration Codes. Use the following codes when referring to HC/MC-130 cargo compartment configurations. The number identifying the configuration capability will follow the letter code.

AE - Aeromedical Evacuation

A - Alert

P - Passenger

1.4. Modifications. The configuration codes of this instruction may require modifications for a specific mission. Each modification must be carefully evaluated prior to mission operation to ensure maximum flight safety and compatibility with aircraft equipment. Each mission directive will identify the basic configuration by code and the modification, if necessary, to satisfy the mission requirement.

1.5. Weight and Balance. Configuration and necessary equipment changes to conduct rescue missions affect the weight and balance of the aircraft. To standardize equipment and the location of the equipment, items shown in **Table 2.1.** will be included in the basic weight of the aircraft and remain on the aircraft except for maintenance and inspection. Equipment listed in **Table 2.2.** will be added as necessary and entered on DD Form 365-4, **Weight and Balance Clearance Form F**, and reference 5, 6, or 7. For simplicity, the loadmaster will enter the weight contained in the required equipment table for the applicable configuration when preparing the DD Form 365-4. Adjustments will be made when the actual on board weight of these items vary from the data shown. DD Form 365-4 will be completed IAW instructions in Chapter 5.

1.6. Distribution. Commanders are responsible for bringing this publication to the attention of affected personnel. At least one copy of this instruction will be maintained in the unit operations section. It will be readily accessible to operations and aircrew personnel. Additional distribution will be as follows:

1.6.1. Staff Operations, all levels.

1.6.2. Aircrew Standardization, all levels.

1.6.3. Command Posts/Operations Centers.

1.6.4. Air Terminal Manager.

1.6.4.1. Aircraft Maintenance Squadrons.

1.6.4.2. Dash 21 Equipment Sections.

1.6.4.3. Quality Assurance Section.

1.6.5. Aerial Delivery Support Flight/Branch.

1.6.6. Life Support Sections.

1.6.7. One located in the supplemental weight and balance handbook binder on each aircraft.

1.7. Revisions. Most revisions will consist of inserted page changes. Some minor write-in changes may be made, but these will be held to a minimum. Personnel at all echelons are encouraged to submit an AF Form 847, Recommendation for Change of Publication, and forward proposed changes to the instruction through channels, to HQ ACC/DOT, IAW AFI 11-215.

1.8. Supplements. Subordinate unit supplements to this instruction that change the basic policies, procedures, or formats prescribed herein are prohibited.

Chapter 2

CONSOLIDATED EQUIPMENT TABLES

2.1. General. Configure all Rescue HC/MC-130 aircraft with the equipment listed in **Table 2.1.** Include this equipment in the aircraft basic weight. Items listed in **Table 2.2.** are added, as necessary, to attain a specific configuration and/or comply with mission directives.

Table 2.1.

HC/MC-130 Standard Equipment

Item	Equipment	Quantity	Location
1.	Air Deflectors, Ramp (Set)	1	IAW applicable flight manual (Note 2)
2.	Aldis Lamp w/Lenses	2	Sta 670 L&R
3.	Anchor Cable Center Supports	2	IAW applicable flight manual and T.O. 1C-130A-9
4.	Anchor Cables	2	IAW applicable flight manual and T.O. 1C-130A-9
5.	Aramid Gloves (Pair)	2	1 – over G-file, 1 - stowage box, Sta 743 R
6.	Armor, Aircraft (Set)	As Required	IAW T.O. 1C-130A-131
7.	Axes, Hand Emergency	2	IAW flight manual
8.	Beverage Containers (2 Gal)	2	Galley (Note 3)
9.	Broom	1	Aft side of rescue bin secured by 2 rubber clamps
10.	Chains, Tiedown (10,000 lb.)	20	5 in left chain box, 15 in right chain box (Notes 4 & 5); left chain box (Note 12)
11.	Chocks	4	Secured as loose equipment
12.	Cords, Interphone (15 ft)	As Required	1 cord at each interphone panel
13.	Cords, Scanner	2	75 ft at interphone panel Sta 245, 50 ft in canvas bag under toilet, footrest Sta 745
14.	Covers, Protective		May be stored as loose equip
15.	GTC & ATM	1 ea.	Stored as loose equipment
16.	Intake/Pitot	4/2	Stored as loose equipment
17.	Tailpipe	4	Stored as loose equipment
18.	Curtains, Antiglare	3	IAW flight manual
19.	Curtains, Night Vision Goggle	2	Rescue Bin
20.	Crew Rest Facilities (bunks w/mattresses)	3	IAW flight manual
21.	Devices, Tiedown (10,000 lb.)	20	15 stowage rack Sta 245, 5 on rack Sta 800 left side (Note 4)

Item	Equipment	Quantity	Location
22.	*Emergency Escape Breathing Devices (EEBD's)	4	Sta 245/Rescue bin (Note 6)
23.	Emergency Escape Hatch Locking Pins	8	Rescue Bin
24.	First Aid Kits	10	2 - B comp, 4 - E comp left side, 2 Fwd each troop door
25.	Fuel Tank Drain Tube	1	Overhead aft cargo door
26.	Fuselage Fuel Tanks	As Required	IAW flight manual (Note 7)
27.	Ground Wires	2	1 - Below G-file, 1 – stowage box Sta 743 right side
28.	Gun Box (weapon stowage)	1	Top of rescue bin
29.	Headsets, w/Microphones	2	Aft side Sta 245/hi-value bin
30.	Hot Cups	2	Galley (Note 11)
31.	Hydraulic Fluid (quarts)	21	Stowage box Sta 810 left side
32.	Jacking Pads (sets)	1	Right side Sta 245
33.	Jump Platforms	2	Left & right IAW flight manual, safetied IAW 1C-130A-9
34.	Knives, V-blade	2	Sta 680 R, 660 L
35.	Ladder, Maintenance	1	Secured as required
36.	Latrine Curtains	2/1 (Note 12)	Stowed overhead near latrine
37.	*Life Rafts (20 person)	2	Left & right inboard centerwing compartment
38.	Lights, Emergency Exit	8/7 (Note 12)	IAW flight manual
39.	Litters	2	On litter stanchion E & F comp, behind side facing seats
40.	Microphones, Hand	3	1 each at pilot & copilot stations, 1 forward of left troop door
41.	Nav Publications	As Required	As Required, below work table or in rescue bin
42.	Nose Gear Pin	1	(In flight) Aft of pilot seat
43.	Oxygen Bottles, Portable	10	IAW flight manual w/Carrying Strap/Harness
44.	Oxygen Hose Extensions (6 foot length minimum)	5	At oxygen regulators: 2 – Sta 660 R lower, 1 - Sta 680 L, 2 – Sta 740 L & R
45.	*Passenger Oxygen Kits (POKs)	3	On flight deck (Note 6)
46.	Personnel Restraint System		IAW flight manual
47.	Publications, Technical	As Required	G-file
48.	*Quick Don (oxygen mask)	5/10	P, CP, NAV, FE, RO and LM

Item	Equipment	Quantity	Location
	w/Goggles (Scott 358 series)	(Note 12)	positions; 3 Cargo Comp (Note 12)
49.	Refrigerator, Electric	1	Under plotter's table (As Required)
50.	*Restraint Harness (PCU-17P)	1	Flight deck Sta 245
51.	*Restraint Harness, PCU-17/P Modified	6	Storage bags Station 627 L & R
52.	Retrieval Bar, Paratroop	1	HC-130N only, Sta 620 L/R
53.	Ropes, Escape	3	IAW flight manual
54.	Seat, Assistant Navigator	1	Below plotter's table, Sta 245 (Note 11)
55.	Seat Belts (set)	As Required	1 - each seat & bunk
56.	Seats, Sidewall	As Required	IAW floor plan configuration (Note 7)
57.	Secure Speech Crypto	1	IAW flight manual
58.	Sextant	1	Forward bulkhead Sta 236
59.	*Smoke Masks w/Microphone	5 (Note 11)	With Portable Oxygen Bottles
60.	Static Line Retriever Winch	1	Aft side Sta 245, left side
61.	Steps, Catwalk (set)	1	IAW flight manual (Note 9)
62.	Straps, Tiedown (5,000 lb.)	20	Lower container in cargo door (Note 12)
63.	Trash Container	1	Aft of or under plotter's table or below aft end of forward crew bunk
64.	Water Jugs	As Required	IAW flight manual (Note 10)

NOTES:

1. Asterisked (*) items indicate configuration IAW AFI 11-301. Store life support items separately from grease, oil, hydraulic fluid, etc.
2. Required for all aerial delivery conducted from the cargo ramp.
3. Water required for all flights.
4. There will be at least 14 tiedown chains and 6 tiedown devices on board for emergency landing gear tiedown. N/A for (H)N aircraft if both landing gear tiedown fixtures, part #3402900-1, are on board.
5. String or wire will be connected diagonally across the top of each chain box (below lid). Hang tiedown chain hooks from the string/wire to allow chains to be inventoried without removing them from the boxes.
6. POKs and EEBDs (for flight deck use) are interchangeable.
7. One, two, or no fuselage tanks may be installed based on mission requirements or alert commitments. A-2 alert configuration will normally require two fuselage tanks.
8. Do not use single sidewall seats unless connected to a 2-man sidewall seat.
9. The catwalk is required when tanks are installed or when it is needed to ensure access to equipment stored in the personnel equipment bins. Steps are required for all flights when two fuselage tanks are installed.

Item	Equipment	Quantity	Location
10. Change water every 30 days and recorded on AFTO Form 781K. 11. N/A for HC-130(H)N aircraft. 12. For HC-130(H)N aircraft.			

Table 2.2.

HC/MC-130 Mission Equipment

Item	Equipment	Quantity	Location
1.	Binoculars (pair)	2	Hi-value bin
2.	Blankets & Pillows w/Cases	6&3	On crew bunks
3.	Bubble, Plastic, Combat	1	Center overhead escape hatch or stowed as loose equipment
4.	*Cot, Infant, LPU-6/P (child under 18 month. old)	2	Upper aft personnel equipment bin
5.	*Coveralls, CWU-Series (Antiexposure suit)	10	Personnel equipment bins
6.	Datum Marker Buoys	2	Rescue Bin
7.	Ear Plugs (foam type)	30 Minimum	Galley or below hi-value bin
8.	Emergency Water w/Cargo	1	Rescue bin Bag (case)
9.	Flares, Parachute, LUU-4/B	12	Sidewalls Sta 940 L & R (Note 5)
10.	*Life Preservers, A/C (Adult/Child, airline type)	4 (Note 3)	Personnel equip bin and/or behind individual seats (Note 3)
11.	*Life Preservers, LPU-2/P or LPU-10/P (crew)	10	Personnel equipment bin /behind individual seats
12.	Life Preserver, MB-1 Casualty	2	Personnel equip bin and/or behind individual seats/litters
13.	Life Preservers, MD-l (child over 18 month. old)	4	Personnel equip bin and/or behind individual seats (Note 3)
14.	Lifting Bar, ODS	1	Aft cargo door bin, left side
15.	Litter Straps (patient securing)	6	Hi-value bin/as required
16.	Loadmaster Drop Kit	1	Hi-value bin (See Attach 7)
17.	Lug All Winch	1/2	(As Req) Hi-value bin/Sta 643 L & R
18	MA-1/2 Kit Rack	1	Aft Ramp F.S. 840
19.	Message Container	1	Rescue Bin
20.	Message Streamers	3	Rescue Bin
21.	Mission Kit	1	Rescue Bin
22.	Parachutes, Cargo, G-8	5	Rescue Bin
23.	Parachutes, Cargo, G-13/G-14/T-10C	2	Rescue Bin
24.	*Parachutes, BA-22, Personnel	Note 7	LM personnel equipment

Item	Equipment	Quantity	Location
	(Back Style)		bins Plus 10%
25.	*Parachutes, CA-12, Personnel (Chest Style)	Note 7	Personnel equipment bins Plus 10%
26.	Passenger Baggage Cover/Net	1	Aft cargo door bin
27.	Passenger Oxygen Kits (POKs)	As Required	Rescue Bin/as required
28.	Radios, Emergency (in vests	2	1 - Over G file, 1- in LM personnel equipment
29.	Ramps, Aux Truck Loading	2	Aft of right troop door
30.	Ramps, Aux Ground Loading	2	Cargo ramp/as required
31.	RAMZ	1/3	1 - On rollers, M compartment, 3 - On rollers, K, L, & M comp
32.	Rations (MRE/LRPS, case)	1	Rescue Bin
33.	Roller Conveyors (8 or 10 ft)	2	Cargo floor, compartments J & K, buttlines 20 L&R
34.	Roller Conveyors (10 ft)	2	Cargo ramp, buttlines 20 L & R
35.	Rope, Buoyant (210 ft)	1	Rescue Bin
36.	Sea Dye, AN-M59	10	Aft cargo door bin (Note 5)
37.	Sea Marker Lights	9	Rescue Bin
38.	*Sea Rescue Kits, MA-1/2	3	Rescue Bin (Note 4)
39.	Seats, Airline Type	As Required	IAW configuration requirements
40.	Seats, Centerline, w/stanchions	As Required	IAW configuration requirements
41.	Smokes, MK 6 Mod 3	5	Aft cargo door bin (Note 5)
42.	Smokes, MK 25 Mod 3	16	Aft cargo door bin (Note 5)
43.	Spacers (MK 6)	5	Aft cargo door bin, left side
44.	*Survival Kit, A-l6, Global	As Required	Secured as loose equipment
45.	*Survival Kits, ML-4/MD-1, Individual	10	IAW configuration requirements
46.	Survival Vests	As Required	Personnel equipment bins
47.	Tool Box, Maintenance	1	Aft of left LM seat
48.	Tool Kit, Flt Engineer's	1	Hi-value bin (Note 6)
49.	Water Jug, 5 gal (Igloo)	1	Forward crew bunk step/as req.

NOTES:

1. Asterisked (*) items indicate configuration IAW AFI 11-301. Store life support items separately from grease, oil, hydraulic fluid, etc.
2. The aircraft will not fly over water unless an approved flotation device is aboard the aircraft for each person and the device is within reach of each seated occupant.
3. MD-1 and A/C life preservers are interchangeable, however both may not be aboard the same aircraft (mixed) at the same time.
4. Equipment not listed in **Figure 2.2.**, but required by an individual unit, will normally be stowed in the rescue bin or the individual personnel equipment bins. One complete MA-

Item	Equipment	Quantity	Location
1/2 kit (bundles 1-5, five bundles only) will be stowed in the aft area of the rescue bin, third section from the bottom. Each unit will publish a chart depicting the location of equipment in the rescue bin and display it on the front of the high value bin door. 5. Record operational mission pyrotechnics and sea dye (items 9, 37, 42, and 43 on AFTO Form 781E, **Accessory Replacement Document**, T.O. 00-20-5). Keep the AFTO Form 781E in the supplemental weight and balance handbook. Units will ensure proper documentation of pyro and timely dissemination of information on suspended lot numbers. Operational mission pyro will not be used for training. Pyrotechnic bin doors and sidewall racks will be closed and secured with safety wire or plastic quick-ties. 6. Flight engineers will provide and maintain tool kit and its contents. 7. Total number of parachutes required is 10 each in any combination of chest and/or back styles.			

Chapter 3

CARGO COMPARTMENT CONFIGURATIONS

3.1. General. This chapter contains basic cargo compartment configuration in floor plan format and weight, location, and moment data for associated required equipment.

3.2. Configuration. Although modifications to the basic configuration are authorized to meet special requirements, the following factors should be considered:

NOTE: Standard configuration will be with the left fuselage tank installed to allow for maximum space for support equipment and personnel. Two fuselage tanks will only be installed if specifically required for enroute air refueling support or at the deployment location.

3.2.1. Sidewall and wheel well seats should be installed/stowed on all missions unless otherwise depicted by this instruction. One-man sidewall seats will not be used unless connected to a two-man seat.

3.2.2. The normal spacing for paratroopers is 24 inches; however, spacing will be as mission dictates. Aircraft without accommodations for 24-inch spacing may be configured in 20-inch spacing.

3.2.3. Drawing in this instruction are not precisely to scale with respect to actual aircraft locations.

3.2.4. See **4.2.**, **Figures 4.1.** and **4.2.** for safety aisle requirements.

3.2.5. Pallet position six is limited to 4,759 pounds when rollers and ramp air deflectors are installed. With four roller conveyors removed and ramp air deflectors installed, a total of 4,919 pounds may be carried. At no time will ramp exceed 5,000 pounds to

3.2.6. Changes in configuration may affect the overall aircraft center of gravity (CG).

3.2.7. There are provisions for up to 12 litters on the aircraft. Litter stanchions are located on the left side of E compartment (up to 4 litters) and on the left and right sidewalls aft of the wheel well (up to 4 litters per side). With fuselage tanks installed, only the top (single) litter positions are available on each side aft of the wheel well.

3.2.8. Overwater flights are limited to a maximum of 40 personnel on the aircraft unless additional wing life rafts are installed.

3.2.9. Portable cargo winches, and the alternate ramp support (milkstool) may be carried, as required by mission requirements. Parachutes will be carried as required IAW AFI 11-301. Trashcans, other than the integral refuse containers, may also be carried.

3.2.10. A safety aisle is required to allow access to the aft end of the aircraft and emergency exits.

3.2.11. When aft facing seats are installed to provide additional seating ensure the seats are adequately secured.

3.3. Legend of Configurations:

3.3.1. AE-1. This AE configuration provides 16 litter spaces on the HC/MC-130 and a total of seven seats. A minimum of three seats is required for the medical crew.

3.3.2. AE-2. This AE configuration provides two litter spaces and four passenger seats. A minimum of three seats is required for the medical crew.

3.3.3. A-1. This configuration allows for 18 total seats, 7 crewmembers including 3 pararescue specialists (PJs). Eight passenger sidewall seats are available.

3.3.4. A-2. This configuration allows for 17 total seats, 7 crewmembers including 9 PJs. One additional seat is available.

NOTE: Due to the excess weight in the aft end of the aircraft during this configuration, the plotter's table should be stowed and the refrigerator removed. This will allow for stowage of PJ gear close to FS 245 for a better aircraft CG.

3.3.5. P-1. Passengers. This configuration allows for 25 total seats, 7 crewmembers and 18 passenger seats.

3.3.6. P-2. Maximum Passengers. This configuration allows for 33 total seats, 7 crewmembers and 26 passengers.

NOTE: Though not normally used, centerline seats may be added to increase the number of available passenger seats.

3.4. Troop Life Preservers. For airdrop of personnel over or near bodies of water, the unit/service being airdropped will furnish the required number of life preservers.

3.5. Configuration Floor Plans. Configuration floor plans are depicted on pages 13 through 20.

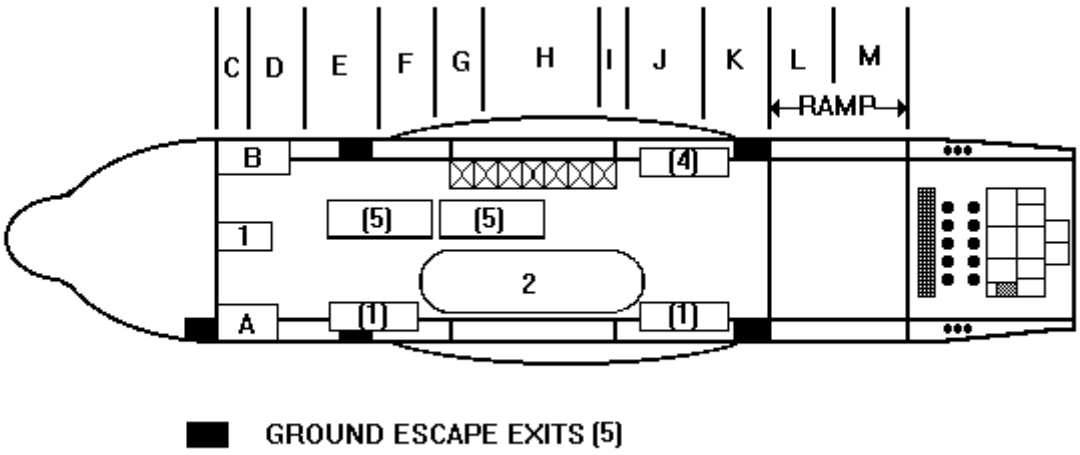
Figure 3.1. AE-1 Configuration Floor Plan and Equipment Data.

NOTE: Ref 5 of DD Form 365-4

STEWARD EQUIPMENT	QTY	WT	STA	MOM
Liquid/Water Containers	A/R			
Passenger Service Kit	1	10	A/R	A/R
Hot Cup	1	3	170	1

NOTE: Ref 6 of DD Form 365-4

EMERGENCY EQUIPMENT	QTY	WT	STA	MOM
MB-1 Life Preserver (Casualty)	30	120	A/R	
Life Preserver	60	240	300	72
LPU-6/P (Infant Cot)	4	16	300	5
Protective Clothing Kit	1	40	300	12
EEBD	5	30	487	15
Passenger Oxygen Kits	A/R			



A – Left Loadmaster Seat
B – Right Loadmaster Seat
1 – Plotter Table
2 – Fuselage Tank

1. This configuration provides 16 litter spaces and a total of 7 seats. A minimum of three seats is required for the medical crew.
2. The number in parentheses in the litter spaces indicates maximum number of litters per tier.
3. Three (3) extra oxygen bottles will be available for medical personnel.
4. Remove right Fuselage tank and catwalk.

NOTE: Aft center litter tier cannot be utilized on HC-130N models only.

NOTE: When both fuselage tanks are removed litter space increases by 16, for a total of 32 On HC-130N models litter space increases by 11 for a total of 22.

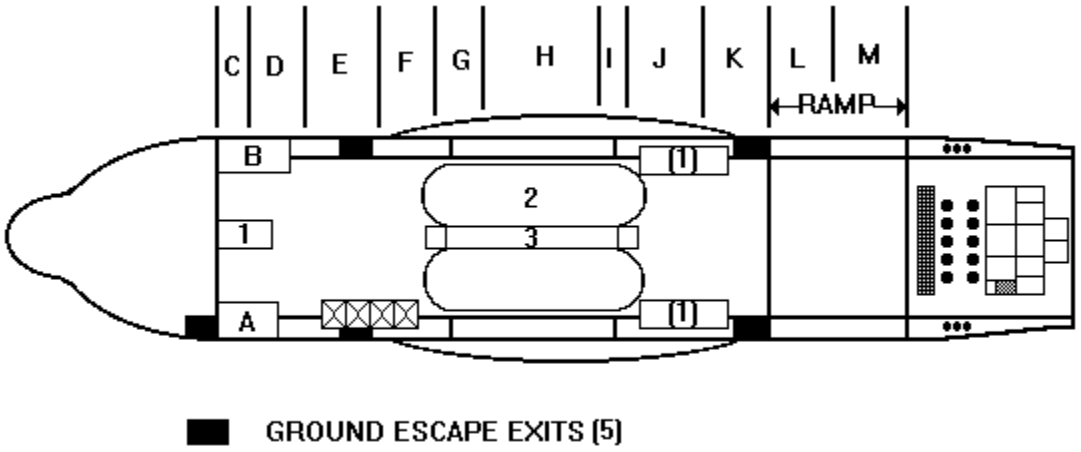
Figure 3.2. AE-2 Configuration Floor Plan and Equipment Data.

NOTE: Ref 5 of DD Form 365-4

STEWARD EQUIPMENT	QTY	WT	STA	MOM
Liquid/Water Containers	A/R			
Passenger Service Kit	1	10	A/R	A/R
Hot Cup	1	3	170	1

NOTE: Ref 6 of DD Form 356-4

EMERGENCY EQUIPMENT	QTY	WT	STA	MOM
MB-1 Life Preserver (Casualty)	74	296	A/R	
Life Preserver	60	240	300	72
LPU-6P (Infant Cot)	4	12	300	4
Protective Clothing Kit	1	40	300	12
EEBD	5	30	487	15
Passenger Oxygen Kits	A/R			



A – Left Loadmaster Seat
B – Right Loadmaster Seat
1 – Plotter Table
2 – Fuselage Tanks
3 – Catwalk/Steps

1. This configuration provides 2 litter spaces and a total of 4 seats. A minimum of three seats is required for medical personnel.
2. The number in parentheses in the litter spaces indicates the maximum number of litters per tier.
3. Three (3) extra oxygen bottles will be available for medical personnel.

Figure 3.3. A-1 Configuration Floor Plan and Equipment Data.

NOTE: Ref 5 of DD Form 365-4

STEWARD EQUIPMENT	QTY	WT	STA	MOM
Liquid/Water Container	A/R			
Passenger Service Kit	1	10	A/R	
Hot Cup	1	3	170	1

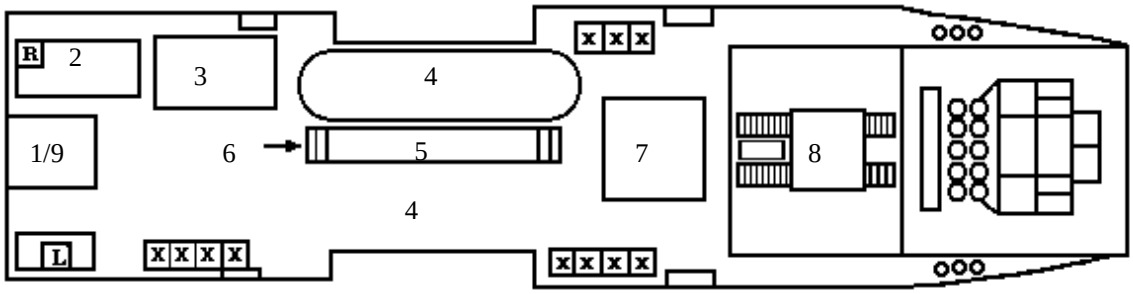
NOTE: Ref 6 of DD Form 365-4

EMERGENCY EQUIPMENT	QTY	WT	STA	MOM
Life Preserver	60	240	300	72
Protective Clothing Kit	1	40	300	12
Passenger Oxygen Kits	A/R			

NOTE: Ref 7 of DD Form 365-4

EXTRA EQUIPMENT	QTY	WT	STA	MOM
*Cargo Winch	1	A/R	270	A/R
*Winch Power Cable	1	48/25	260	A/R

NOTE: *As required by mission directive



Key to Floor Plan Diagrams

1	Plotter's Table	7	PJ Gear
2	Crew Bunk	8	RAMZ (on rollers)
3	Rescue Bin	9	Refrigerator
4	Fuselage Tank	L	Left Loadmaster Seat
5	Catwalk	R	Right Loadmaster Seat
6	Catwalk Steps	X	Side-facing Seats

Figure 3.4. A-2 Configuration Floor Plan and Equipment Data.

NOTE: Ref 5 of DD Form 365-4

STEWARD EQUIPMENT	QTY	WT	STA	MOM
Liquid/Water Container	A/R			
Passenger Service Kit	1	10	A/R	
Hot Cup	1	3	170	1

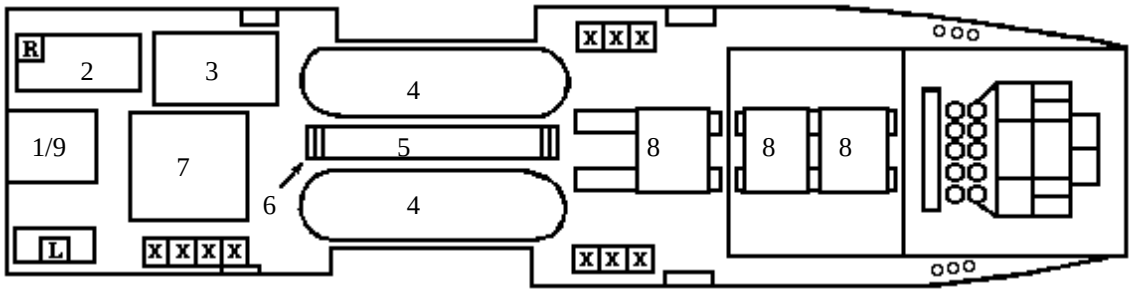
NOTE: Ref 6 of DD Form 365-4

EMERGENCY EQUIPMENT	QTY	WT	STA	MOM
Life Preserver	60	240	300	72
Protective Clothing Kit	1	40	300	12
Passenger Oxygen Kits	A/R			

NOTE: Ref 7 of DD Form 365-4

EXTRA EQUIPMENT	QTY	WT	STA	MOM
*****Cargo Winch	1	A/R	270	A/R
*****Winch Power Cable	1	48/25	260	A/R

NOTE: *****As required by mission directive



Key to Floor Plan Diagrams

1	Plotter's Table	7	PJ Gear
2	Crew Bunk	8	RAMZ (on rollers)
3	Rescue Bin	9	Refrigerator
4	Fuselage Tank	L	Left Loadmaster Seat
5	Catwalk	R	Right Loadmaster Seat
6	Catwalk Steps	X	Side-facing Seats

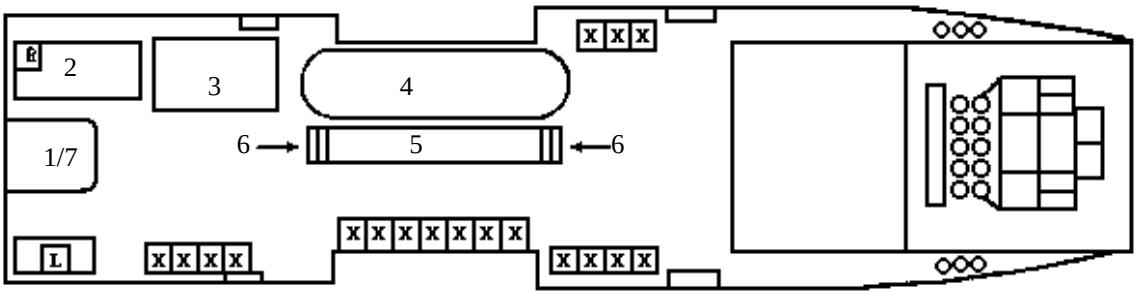
Figure 3.5. P-1 Configuration Floor Plan and Equipment Data.

NOTE: Ref 5 of DD Form 365-4

STEWARD EQUIPMENT	QTY	WT	STA	MOM
Liquid/Water Containers	A/R			
Passenger Service Kit	1	10	A/R	
Hot Cup	1	3	170	1

NOTE: Ref 6 of DD Form 365-4

EMERGENCY EQUIPMENT	QTY	WT	STA	MOM
Life Preserver	80	320	300	96
Protective Clothing Kit	1	40	300	12
Passenger Oxygen Kits	A/R			



Key to Floor Plan Diagrams

1	Plotter's Table	6	Catwalk Steps
2	Crew Bunk	7	Refrigerator
3	Rescue Bin	L	Left Loadmaster Seat
4	Fuselage Tank	R	Right Loadmaster Seat
5	Catwalk	X	Side-facing Seats

Figure 3.6. P-2 Configuration Floor Plan and Equipment Data.

NOTE: Ref 5 of DD Form 365-4

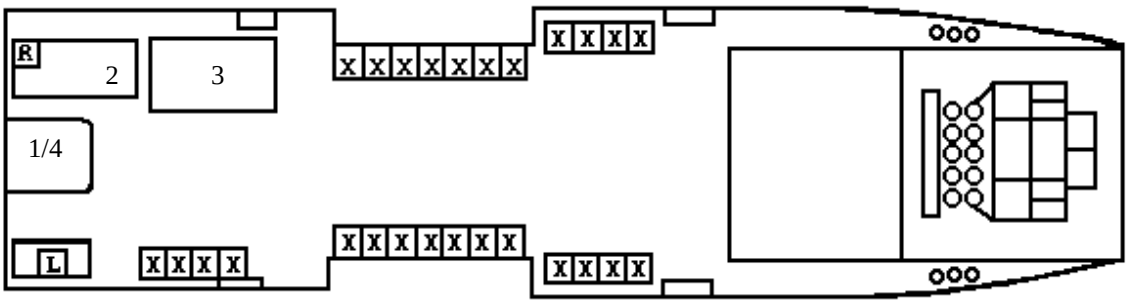
STEWARD EQUIPMENT	QTY	WT	STA	MOM
Liquid/Water Containers	A/R			
Passenger Service Kit	1	10	A/R	
Hot Cup	1	3	170	1

NOTE: Ref 6 of DD Form 365-4

EMERGENCY EQUIPMENT	QTY	WT	STA	MOM
Life Preserver	60	240	300	72
LPU-6/P (Infant Cot)	4	16	300	5
MB-1 vest (Casualty)	2	8	300	2
Protective Clothing Kit	1	40	300	12
Passenger Oxygen Kits	A/R			

NOTE: Ref 7 of DD Form 365-4

EXTRA EQUIPMENT	QTY	WT	STA	MOM
Comfort Pallet	1	A/R		
Palletized Seats	A/R			
Portable Lavatory	A/R			



Key to Floor Plan Diagrams

1	Plotter's Table	L	Left Loadmaster Seat
2	Crew Bunk	R	Right Loadmaster Seat
3	Rescue Bin	X	Side-facing Seats
4	Refrigerator		

Chapter 4

REFERENCE DATA

4.1. General. This chapter contains reference data to assist personnel in load planning.

4.2. Emergency Exits and Safety Aisles. Load aircraft in such a manner that the following emergency exits and safety aisles are available:

4.2.1. At least one cabin emergency exit is unobstructed.

4.2.2. At least one unobstructed emergency exit is available for each 20 passengers/troops. Litters and seats erected across an emergency exit are not considered as an obstruction.

4.2.3. When passengers are being airlifted, an unobstructed aisleway will be maintained in the wheel well (pallet positions 3 & 4) and ramp area (pallet position 6) to provide access to emergency exits. In the wheel well area the aisleway will be a minimum of 14 inches wide between the outer edge of the cargo and the aircraft and will begin at the cargo floor. Tiedown equipment (463L nets, straps, chains, devices) shall not normally be considered an obstruction. The aisleway should normally be on the left side of the aircraft. If the aisleway is placed on the right side of the aircraft, then clearance to the right side of the aircraft must be maintained. Access to aft latrine facilities requires an 18-inch clear area on the forward left or right side of cargo loaded on the ramp.

4.2.4. If the aisleway requirement in paragraph 4.2.3. cannot be achieved on missions carrying crew only or mission-essential personnel authorized by operations order/plan or DIRMOBFOR, then an aisleway will be maintained in the wheel well area that provides a minimum of 14 inches between the outer edge of the cargo and aircraft beginning no higher than 36 inches above the floor/pallet/platform or a minimum of 30 inches between the outer edge of cargo and the aircraft beginning no higher than 60 inches above the floor/pallet/platform.

4.2.5. During airdrop missions; loadmasters shall have access to the rear of the aircraft to accomplish tactical checklists.

4.2.5.1. Removal of a fuselage tank may be necessary to provide a safety aisle when outsized cargo is carried. In some instances, it may be necessary to carry outsized cargo when removal of the fuselage tank would degrade mission capability to an unacceptable level. In that event, and at the discretion of the unit commander, the aircraft may be flown with a restricted safety aisle, provided the aircrew has reasonable access to the rear of the aircraft and passengers are behind the cargo with ready access to an escape hatch.

4.2.6. On all missions, cargo will be loaded in such a way that the crew will have access to the rear of the aircraft. Loads in section VI of T.O. 1C-130A-9 are specific and do not require a waiver.

4.3. Miscellaneous Data. The following tables and charts are provided to aid in configuration planning, and weight and balance:

4.3.1. **Figure 4.1.** and **Figure 4.2.**, Safety Aisles.

4.3.2. **Table 4.1.**, Standard Weights.

Figure 4.1. Safety Aisles, Wheel Well Area, With Passengers.

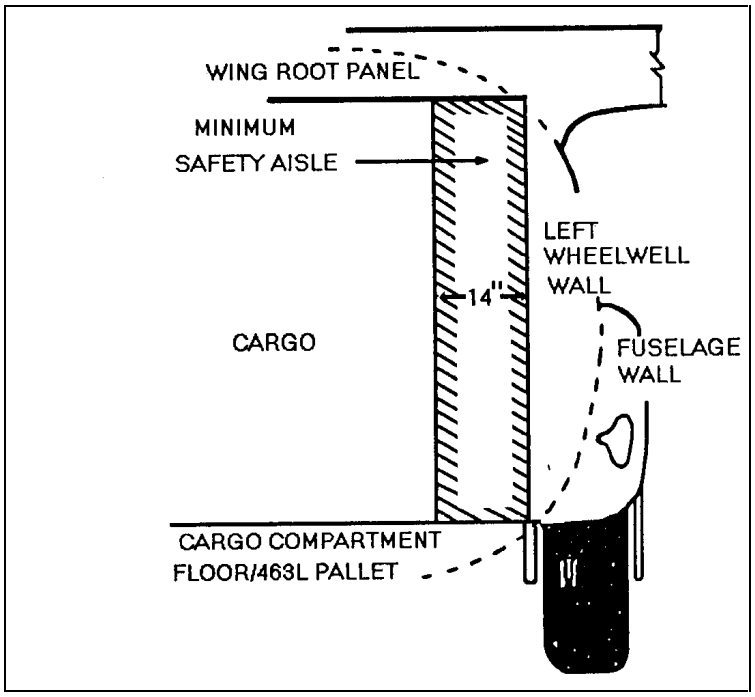
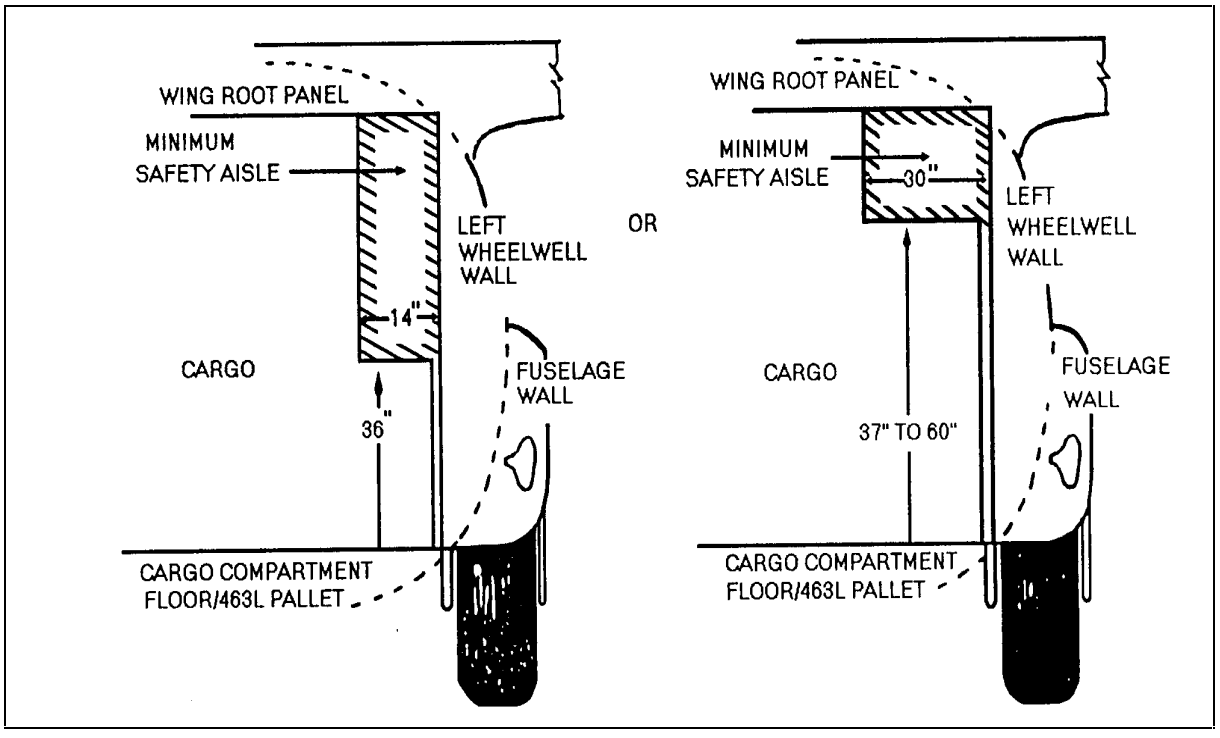


Figure 4.2. Safety Aisles, Wheel Well Area, Without Passengers.



4.4. V-Blade Knife Sheath.

4.4.1. Install V-blade knife with sheath assembly on the aircraft and enter it as special equipment on the aircraft inventory, DD Form 2202. This knife is to be used for emergencies only.

4.4.2. Units will order sufficient V-blades and keys, crash rescue type, MA-l knives: part number 5367126 is listed in the 5110 stock catalog as 5110-524-6924 local purchase. Upon receipt, units will:

4.4.2.1. Disassemble and spray each part of the knife separately with clear, acrylic plastic or other suitable preservative to prevent rusting and corrosion. Do not use Peralkatone. Reassemble knife, omitting the delta-shaped blade key.

4.4.2.2. Locally manufacture sheath and plates per this attachment. Construct the entire sheath assembly with canvas and cover with Duracote.

4.4.2.3. Drill a 3/16- hole in the center of the handle, directly above the centerline of the shank.

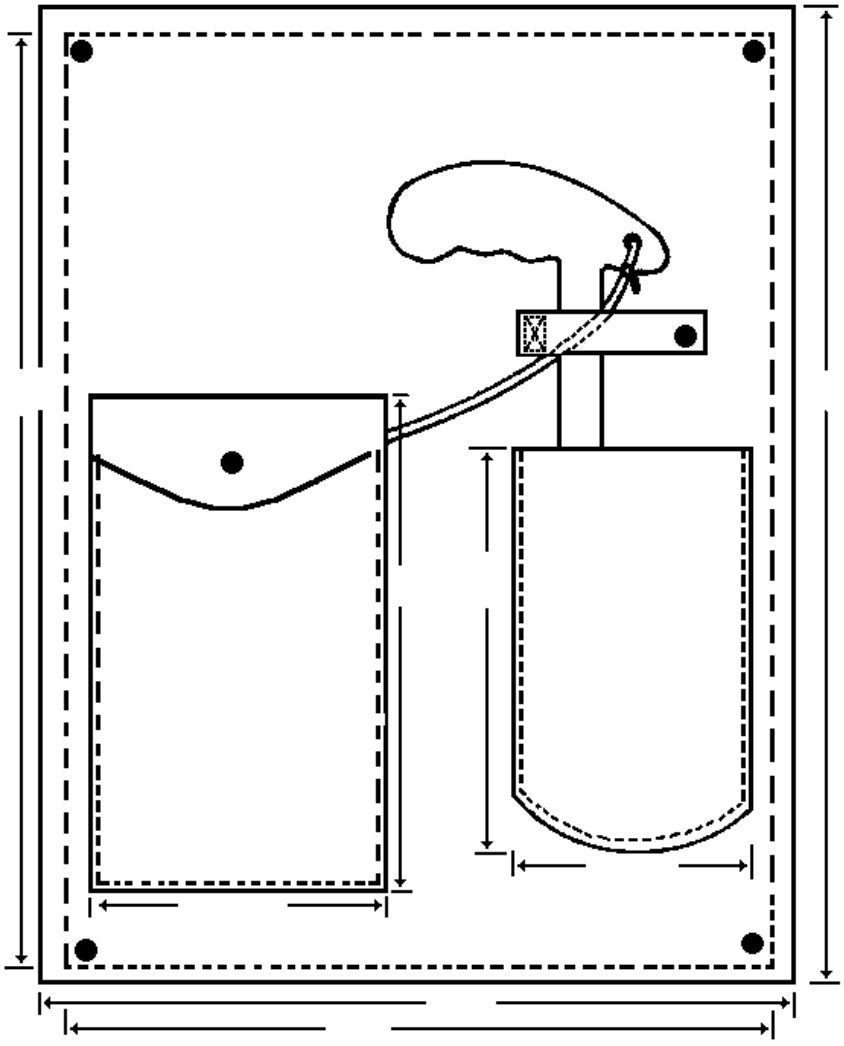
4.4.2.4. Tie a 10 ft. length of Type III Nylon (550 cord) to the knife through the drilled-hole and secure the other end to the strap sewn into the stowage pocket of the sheath assembly. Fold the line. Do not coil it. Bind the line with a rubber band for neat stowage and to prevent tangling.

4.4.3. Care of the V-blade knife.

4.4.3.1. Inspect the knife for rust or corrosion during each preflight inspection. Remove rust and corrosion and spray all parts with plastic or other preservative as often as necessary.

4.4.3.2. After each use of the knife, remove the blade and sharpen, then recoat with preservative.

Figure 4.3. V-Blade Knife and Sheath Assembly



4.5. Emergency Water/Cargo Bag

4.5.1. Items needed to manufacture one emergency water/cargo bag:

4.5.1.1. Zipper, 23 inches long FSN 5325-162-7517, 2 each

4.5.1.2. D Ring FSN 1670-491-1048LS, 4 each

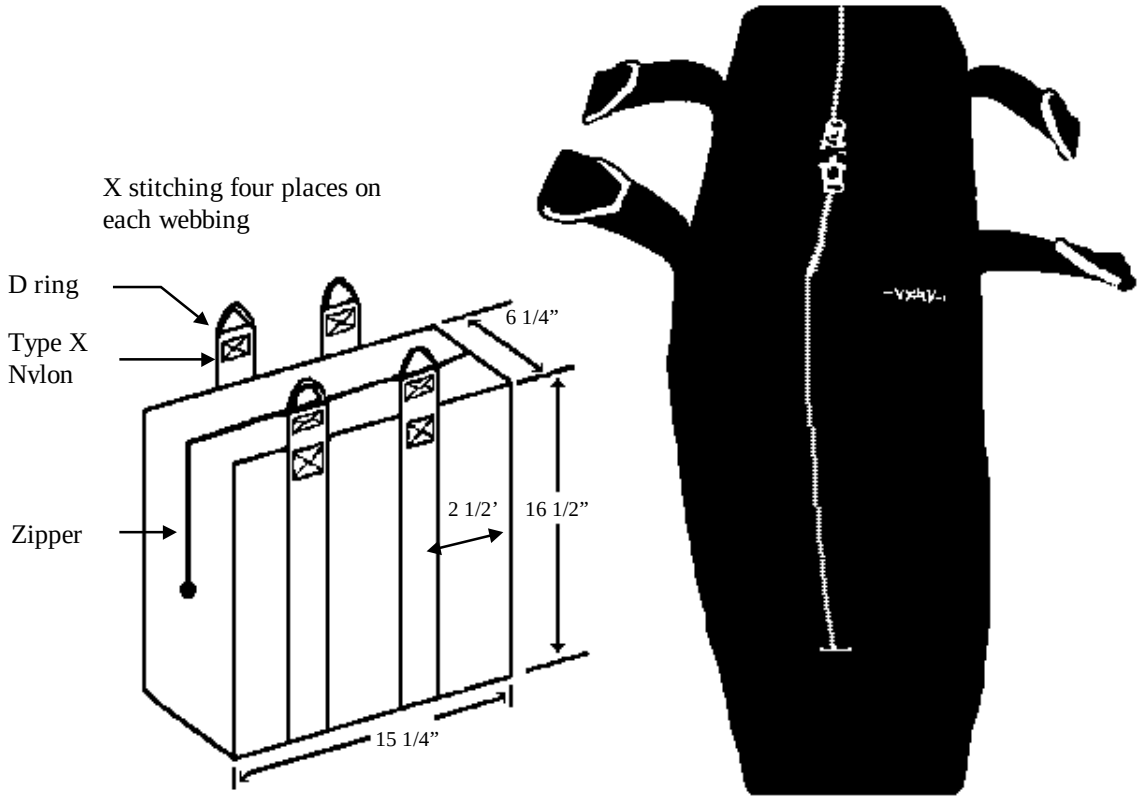
4.5.1.3. Cotton cloth duck FSN 8305-223-1285, 1 yard

4.5.1.4. Webbing, textile, type X nylon FSN 8305-281-3013, 2 each (58 inches long)

4.5.1.5. Board (1” x 6” x 15”) Drill 1/4” hole through each end of the board and connect board to the bottom (inside) of the bag.

4.5.1.6. Padding material (Honeycomb/felt) (1” x 6” x 15’)

Figure 4.4. Emergency Water Bag Assembly



4.6. **Roller Conveyer Installation**

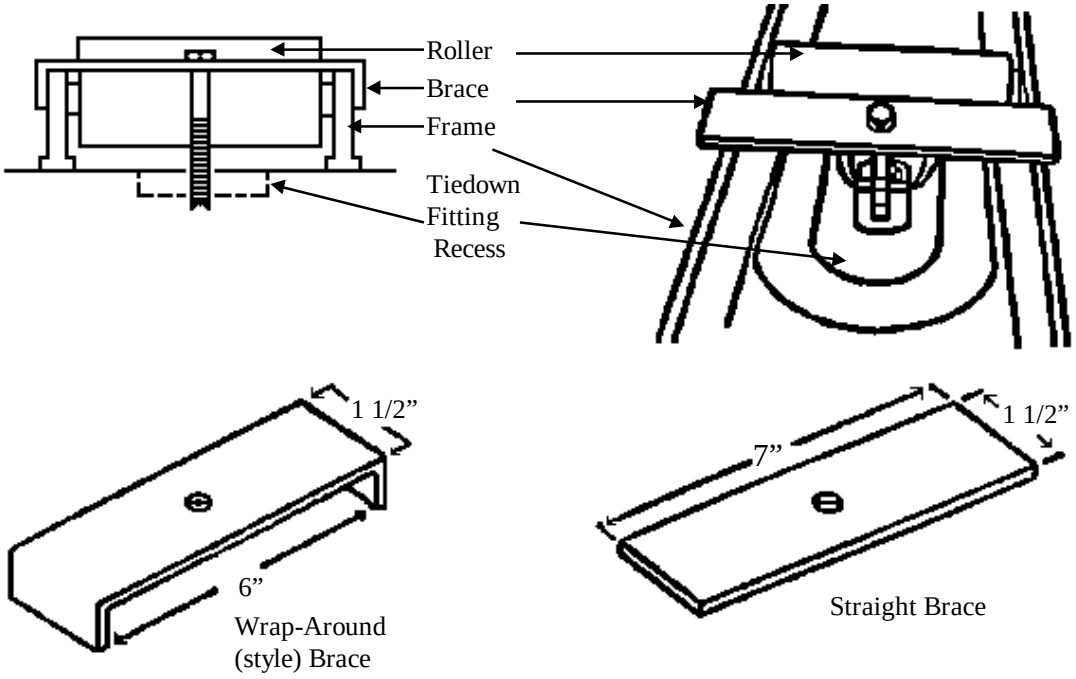
4.6.1. Install roller conveyors on the cargo ramp end, if three RAMZ are to be loaded, on the cargo floor. Two ten-foot sections are installed on the cargo ramp and two eight-foot sections are on the cargo floor in J and K compartments. Center rollers over tiedown rings at buttline 20 left and right. The rollers may be either A/A32H-4A (-4) or warehouse (skatewheel) type rollers.

4.6.1.1. A/A32H-4A Rollers. Due to past modification to the HC-130 cargo floor and ramp, the - 4 rollers will not attach to the floor as they were designed. Locally manufactured braces and bolts are needed to secure the roller conveyors. Place two braces laterally across the top edge of each roller conveyor frame, while the bolts are attached vertically through predrilled holes in the braces to tiedown ring bolt receptacles. (See diagrams, this attachment)

4.6.1.2. Skatewheel Rollers. On each roller conveyor, two keepers are installed diagonally between a skatewheel axle and a tiedown ring. One keeper must be angled forward while the other is angled aft. (See diagrams, this attachment

4.6.2. Until the HC-130 floors are modified by TCTO 1C-130(H)H-5-5 to accept rollers, the preferred method of attaching - 4 rollers is with braces and bolts or with keepers for the skatewheel type. If braces and bolts/keepers are unavailable, steel safety wire (0.032 or greater, not less than four turns) may be installed at three (minimum) points to secure each roller conveyor section. This is a less desirable method of attachment.

Figure 4.5. A/A32H-4 Roller Conveyor and Braces



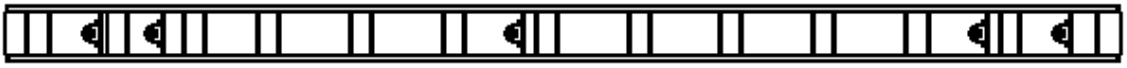
Wrap-Around
(style) Brace

Straight Brace

NOTES:

1. Braces are locally manufactured, 1/8 inch steel
2. Braces require 3/8-inch hole in center
3. Ramp bolt - 5/16-inch diameter, NAS 1105, NSN 5306-00-088-9588.
4. Floor bolt - 3/8-inch diameter, NAS 1106, NSN 5306-00-834-4558.
5. Roller conveyors on floor are 8 ft; conveyors on ramp are 10 ft.
6. All measurements are minimums and drawings are not to scale.

-4 Roller Conveyors

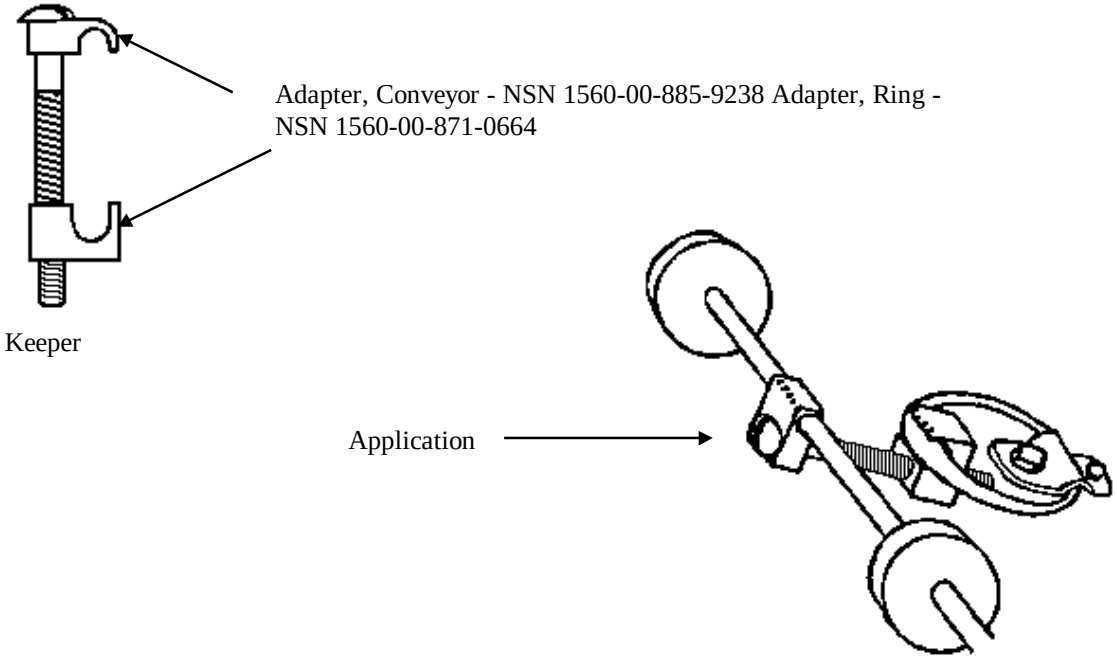


Top View

FWD ⟶

Side View

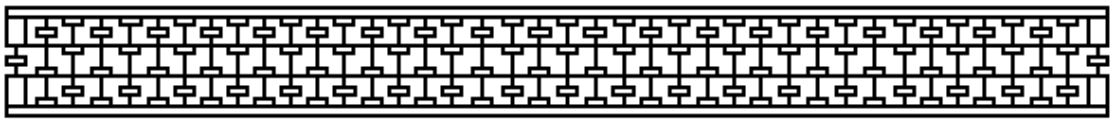
Figure 4.6. Skatewheel Roller Conveyor (Two Styles) and Keeper



NOTES

1. Roller conveyors are 10 feet long on ramp and 8 or 10 feet long on floor. Some types of skatewheels (C-123) may be installed on the floor in 10-foot lengths.
2. The term "Keeper" is not official terminology.
3. Drawings are not to scale.

GPS 251 (Roller) Conveyor - NSN 3910-01-098-4304



MILC 11218 (Roller) Conveyor - NSN 3910-00-881-9951

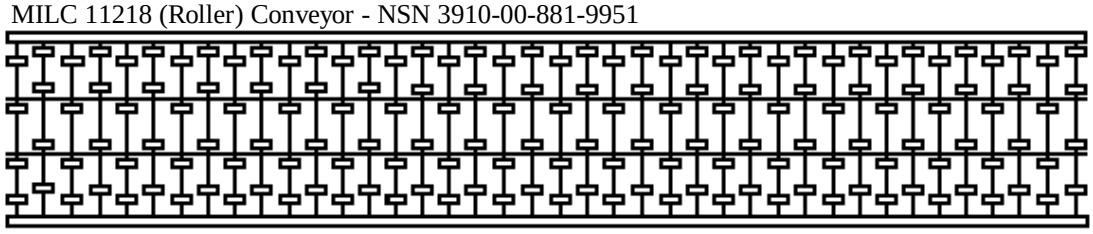
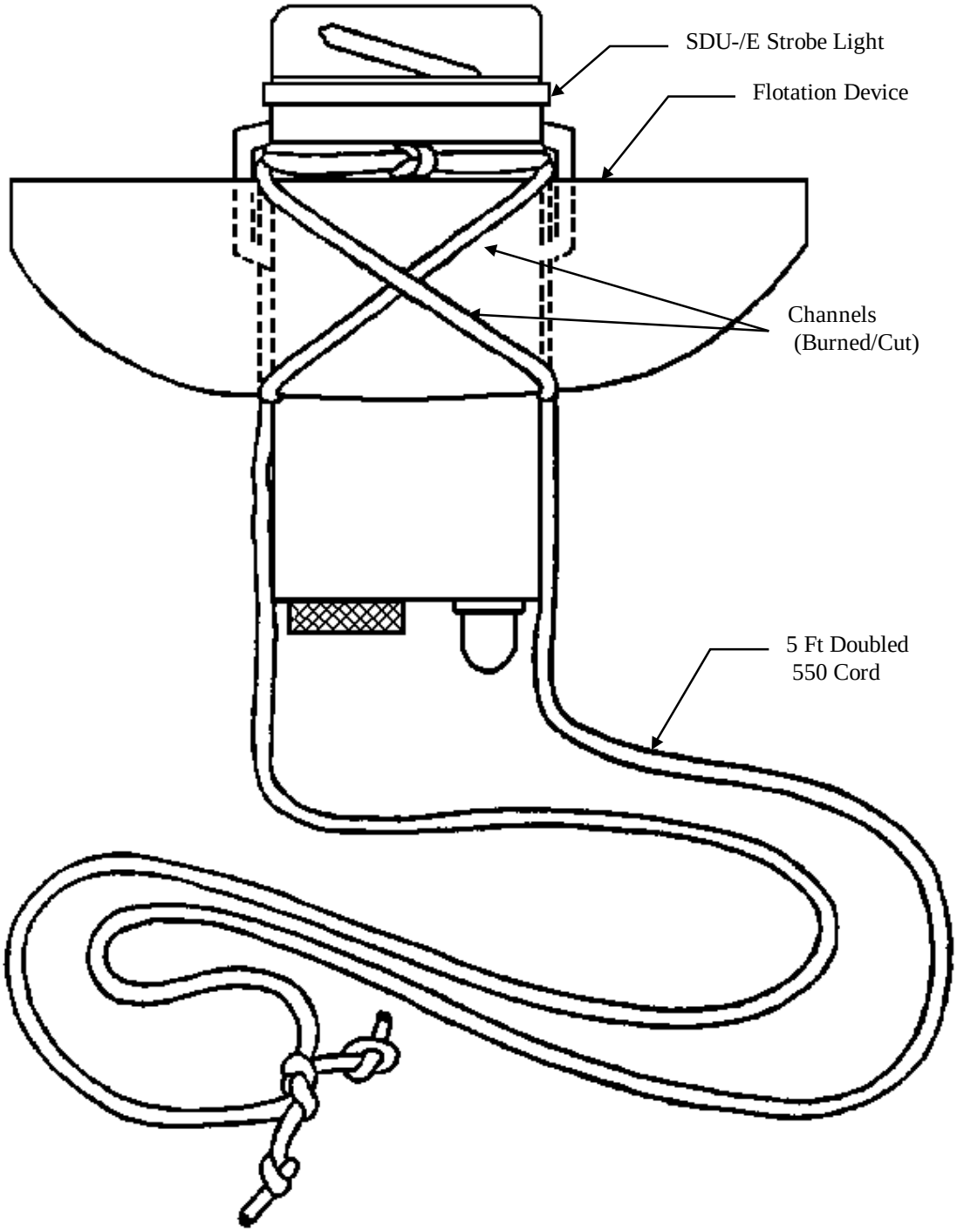
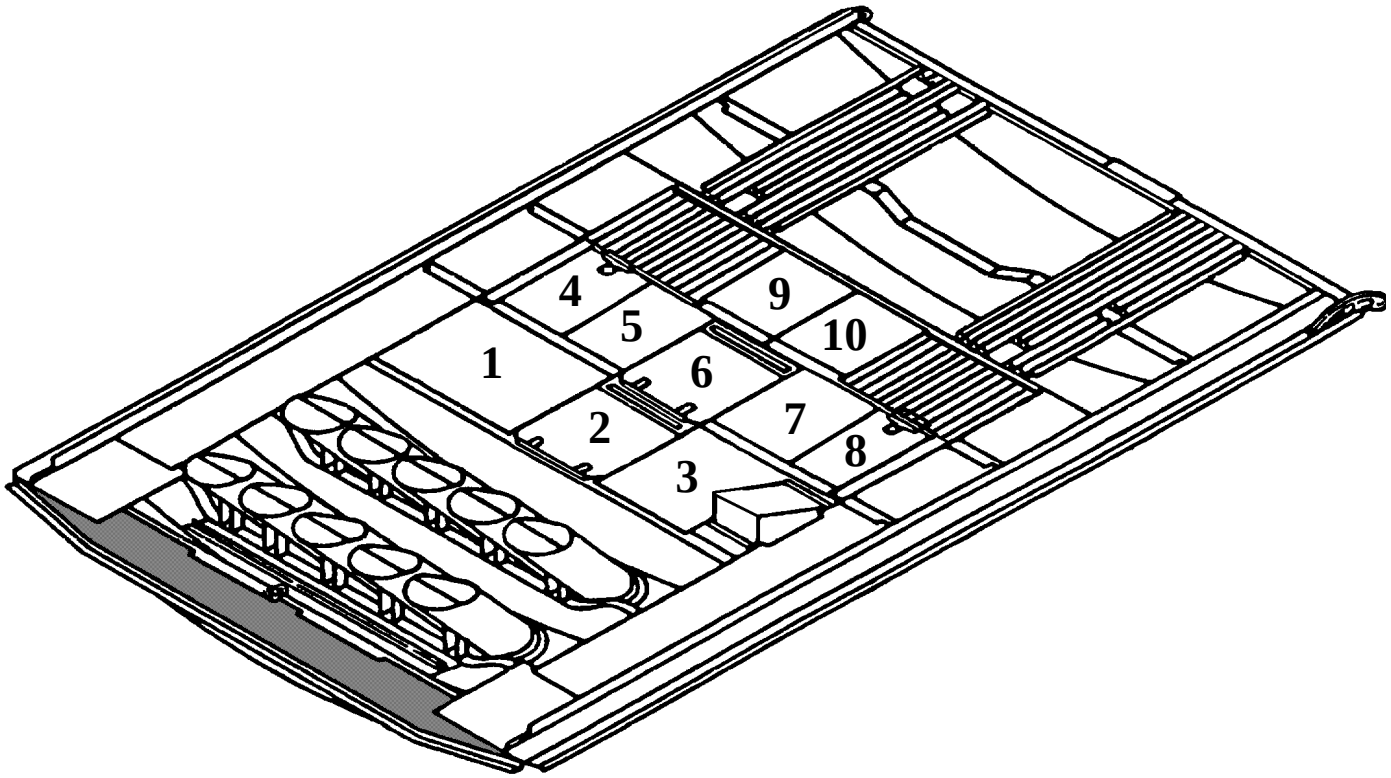


Figure 4.7. Sea Marker Light Assembly



NOTE: Drawing is not to scale.

Figure 4.8. Cargo Door Storage.



1. Storage Bin - 1 MK-6, 3 MK-25, 12 Sea dye, and 1 MK-6 spacer.
2. Storage Bin - Lug-all, drop kit, 2 carabinas, MA-1 lights, and engineer tool bag.
3. Storage Bin - Blackout kit.
4. Storage Bin - 2 each 25,000 lb chains, and devices.
5. Storage Bin - 54” static line retriever cable extension, and 10 - 10,000 lb straps.
6. Storage Bin - 5000 lb tiedown straps.
7. Stowage Bin - NVG curtain and cargo door down locks.
8. Stowage Bin - Misc.
9. Stowage Bin - Misc.
10. Stowage Bin - Misc.

Table 4.1.

Standard Weights

ITEMS:		Weight/lbs
Crewmember (with professional gear)		200
Passenger (without baggage)		175
Patient, litter (without baggage)		195
Patient, ambulatory (without baggage)		160
	Training	Combat
Ground trooper (GT) with web gear and weapon	210	210
Ground trooper with carry-on baggage	210	210
Ground trooper with web gear, weapon, and rucksack	250	300
Ground trooper with combat equipment/tools	250	300
GT w/ web gear, weapon, rucksack, and duffel bag	350	400
GT with combat equipment/tools and duffel bag	350	400
Parachutist with web gear, weapon, and rucksack	300	350
Parachutist, Hollywood--no equipment or weapon	220	N/A
Rucksack	40	80
Pararescueman, Land (no equipment/weapon)	240	240
Pararescueman, Land (fully equipped)	300	300
Pararescueman, Water (minimum equipment)	240	240
Pararescueman, Water (fully equipped)	300	300

NOTE: The personnel standard weights are for planning purposes only. Actual weights will be used if known.

EQUIPMENT WEIGHTS:

Equipment	Weight/lbs
Blanket, (large/small)	3.5/1
Antiexposure suit	6
Buffer stop assembly	585
Centerline vertical restraint (9-piece set)	397
Comfort pallet (serviced) (C-141)	3740
Comfort pallet (unserviced) (C-141)	3020
Comfort pallet (serviced) (C-5)	4049
Comfort pallet (unserviced) (C-5)	3325
Datum Marker Buoy, with battery (large/small)	22/3
Emergency escape breathing device (EEBD	6
Flare, Parachute, LUU-2/B	29
Flare, Parachute, LUU-4/B	17
Gloves, Firefighter's Aramid	2
Hot cup	3
Hydraulic Fluid (or oil), (case/quart)	52/4
Ladder, Utility	42
Litter (air evac)	14
LPU-10/P-2/P life vest	4
LPU-5/P life vest	4
LPU-6/P life vest (infant survival cot)	4

Life raft (20-person)	180
Liquid container w/contents ("M" compartment)	25
Liquid container w/o contents ("M" compartment	9
MA-1 Kit	232
MA-2 Kit	311
MA-1/2 Kit Rack	25
Mattress, Foam (with cover)	10
MB-1 life vest (casualty)	4
MB-2 (survival) kit	45
Oxygen bottle, portable	6
Oxygen Console, HALO/HAHO	100
Parachute, Cargo, G-8/M-390	3
Parachute, Cargo, G-13 or G-14/T-10C	38/20
Parachute, Personnel (chest)	28
Parachute (back)	30
Passenger oxygen kit (15 in foot locker)	60
Passenger service kit	10
Personnel restraint harness, PCU 17/P	9
Pillow, (large/small)	2/.5
Portable lavatory assembly	400
Radio, PRC-90	2
Ramps, Aux Ground Loading (set of 2)	80
Ramps, Aux Truck Loading (set of 2)	102
RAMZ (with fuel)	950
Roller Conveyors, C-130 2 ea. 8/10-foot)	70/80
Roller Conveyors, Skatewheel (2 ea. 8/10-foot)	80/110
Rations, Emergency, MRE/LRPS (case)	37
Single lavatory on pallet	600
Double lavatory on pallet	200
Protective clothing kit	40
Pry bar	49
Ramp support (wooden)	50
Sea Dye, MK 1 Mod 2/3	4
Sea Dye, AN-M59	1.5
Sea Marker Light, with battery	1
Seats, Aft Facing (double/triple)	65/94
Seat, Side Facing, (single)	3.5
Seats, Side Facing (double)	7
Sled, Global (A-16)	222
Smoke mask	1
Smoke, MK 6 Mod 3	16
Smoke, MK 25	4
Snatch block (PN 7320110-3)	8
Stanchion, Seat/litter	30
Survival Vest	9
Tiedown, chain, MB-1/CGU-4/E	7
Tiedown, chain, MB-2/CGU-3/E	20
Tiedown, device, MB-1/CGU-4/E	3.5

Tiedown, device, MB-2/CGU-3/E	6
Tiedown, strap, CGU-1/B	4
Water, container (2-gal, Igloo (w/contents))	25
Water, container (5-gal, Igloo (w/contents))	50
Water, drinking, per gallon	8
Winch, cargo, HCU-9/A	290
Winch, cargo, Hoover	249
Winch, cargo, Bulldog 41B	196
Winch, cargo, Bulldog 41BG	175
Winch, power cable	48/25

Table 4.2.

Protective Armor

	LOCATION WEIGHT	STATION	MOMENTS
Flight Station	1,140 lbs	FS 186	212
Nose Wheel Well and LOX Bottle	215 lbs	FS 133	29
Cargo Compartment	250 lbs	*****FS 720	*****180

***NOTE:** This table shows the cargo compartment armor installed on the troop doors. If the armor is relocated to provide protection for a two-man seat, moments must be recalculated.

Chapter 5

DD FORM 365-4 – INSTRUCTIONS FOR HC/MC-130P/N SERIES AIRCRAFT

5.1. Introduction. This chapter provides instructions for computation and completion of DD Form 365-4 (Weight and Balance Clearance Form F). The Form F will be computed by using simplified moments. All entries and signatures must be legible.

5.2. Load Planning. The cargo load must be planned so that the center of gravity of the loaded aircraft will be within the specified forward and aft limits for any given operating condition. Consideration must also be given to offload sequence, aircraft limitations, and emergency jettisoning. Math, charts contained in T.O. 1C-130X-5, and aircraft load adjuster (slipstick) are tools which may be used for load planning. When the fuel load is unknown, load plan for a 20-22 percent of MAC zero fuel.

5.3. General Instructions. These instructions apply to Forms F using simplified moments. Entries on the form may be either typed, handwritten, or computer entered.

5.3.1. DD Form 365-4 Heading. Enter date, mission number, aircraft type, serial number, departure and destination station (name or ICAO identifier), home station of aircraft, and pilot's rank and last name.

5.3.2. Limitations Column. Enter the appropriate weight and CG limits for the planned mission using the following criteria: the maximum gross weight and center of gravity limits specified in T.O. 1C-130X-1 will not be exceeded. Gross weights may also be limited by operating conditions; i.e., obstacle clearance, rate of climb, weather conditions, altitude, runway/taxiway bearing capacity, or any other published restrictions. The pilot/flight engineer will inform the loadmaster of any gross weight restrictions prior to mission planning so an accurate ACL may be obtained.

5.3.2.1. Takeoff. Unless other restrictions are imposed, use 155,000 pounds for HC/MC-130P/N, and subtract total aircraft weight (reference 12).

5.3.2.2. Landing. Unless other landing restrictions, such as assault landing, are imposed, use 155,000 pounds for HC/MC-130P/N, and subtract operating weight plus estimated landing fuel (references 9 and 23).

5.3.2.3. Limiting Wing Fuel. Computed IAW Limiting Wing Fuel Chart in this attachment or T.O. 1C-130X-1, section V, for takeoff and landing. The most restrictive weight will be used.

NOTE: The limiting wing fuel chart in this attachment is based on a 2.5 G maneuver load factor with indicated airspeed restrictions outlined in area "C" of the flight manual limitation charts. The aircrew using the appropriate flight manual weight limitations chart must compute specific mission requirements exceeding area “C” limitations.

NOTE: Enter the allowable gross weight for limiting wing fuel and subtract the operating weight (reference 9) to determine limiting wing fuel allowable load. After subtracting any fuselage tank fuel the limiting wing fuel allowable load, enter the smallest of the three figures as ACL in the remarks section.

5.3.3. Permissible CG Takeoff and Landing. Compute the forward and aft center of gravity limitations using the center of gravity table in the appropriate T.O. 1C-130X-5. Leave blank the block entitled Permissible CG Zero Fuel Wt.

5.3.4. Signature Blocks:

5.3.4.1. Computed by: signature, rank, and organization.

5.3.4.2. Weight and Balance Authority: Leave blank

5.3.4.3. Pilot: Signature, rank and organization on original and duplicate.

5.4. Instructions for Moment Form F. Use applicable T.O. 1C-130X-5, Chart E.

5.4.1. Reference 1. Enter basic weight and moment from the last entry of the certified copy of DD Form 365-3 (Chart C) in the aircraft weight and balance handbook.

5.4.2. Reference 2. Leave blank.

5.4.3. Reference 3. Enter the number of crewmembers, locations, weight, and moment from crew/cargo compartment tables.

5.4.4. Reference 4. Enter crew baggage by location. Determine weight and moment.

5.4.5. References 5, 6, and 7. Determine amount of equipment on board and enter by location. Determine weight and moment.

5.4.6. Reference 8. Leave blank.

5.4.7. Reference 9. Total of references 1 through 8.

5.4.8. Reference 10. Enter total takeoff fuel and determine moments from fuel moment charts.

NOTE: In the remarks section, enter a breakdown of takeoff fuel weight, including fuselage tank fuel, to the nearest 100 pounds and moments using the fuel moment charts contained in the applicable T.O. 1C-130X-5. An alternate method of computing total fuel moments is accomplished by multiplying the total fuel by .552, then adding the fuselage fuel tank moments. In this instance only the total wing fuel weight, moment and total fuselage tank fuel weight and moment need to be shown for takeoff and landing.

5.4.9. Reference 11. Leave blank.

5.4.10. Reference 12. Total of references 9 and 10.

5.4.11. Reference 13. Distribution of Allowable Load (Payload).

5.4.11.1. Enter weight of cargo pallets, vehicles, rolling stock, floor-loaded cargo, etc., by determining the fuselage station of the cargo center of balance. Large items will be listed separately. Items loaded side by side may be combined. General cargo may be compartment loaded. Determine moment.

5.4.11.2. Enter number and weight of passengers/troops/litters using either a compartment centroid or each individual's weight by location centroid. Determine moment.

5.4.11.3. CDS containers may be entered by compartment centroid or individual container centroid. Determine moment.

NOTE: During engine running onloads or when planned ground times preclude use of procedures in **5.4.11.1.** through **5.4.11.3.**, a combined load C/B may be used if a validated load plan is presented.

NOTE: The total weight of reference 13 shall not exceed the smallest allowable load determined by the limitation block.

5.4.12. Reference 14. Compute and enter zero fuel weight and zero fuel moment by adding references 9 and 15. Zero fuel percent of MAC is not required, but may be helpful when targeting a 20-22 zero fuel percent of MAC.

5.4.13. Reference 15. enter totals from reference 13.

5.4.14. Reference 16. Total of references 12 and 15.

5.4.15. Reference 17. Enter the takeoff CG in percent of MAC.

5.4.16. Reference 18. When applicable, enter correction from computations in corrections column.

NOTE: Computations in the corrections column may require correction of the zero fuel figures, but is not mandatory.

5.4.17. Reference 19. Adjustments after weight or moment from reference 18 are either added or subtracted to/from reference 16.

5.4.18. Reference 20. Enter corrected CG in percent of MAC, as required.

NOTE: References 18, 19, and 20 will be left blank if corrections are not required.

5.4.19. Reference 21. Enter figures from reference 14.

5.4.20. Reference 22. If required, subtract airdrop load weight and moment from reference 21 or changes in corrections column and enter as adjusted zero fuel weight/moment on first blank line in reference 22. First blank line title will read, "Adj ZFW/M".

5.4.21. Reference 23. Enter landing fuel weight and moment, obtained by determining estimated amount of fuel remaining in tanks for landing. Moment can be determined by using fuel charts in the applicable T.O. 1C-130X-5, or by multiplying the total fuel on board by .552.

NOTE: In the remarks section enter a breakdown of landing fuel weight/moment by tank. (Refer to paragraph 5.4.8. for computing fuel moments using alternate method.) When flight plan fuel weights are not available, use the following criteria to compute fuel burnoff. (PPH = pounds per hour.)

4,500 PPH - normal flight at altitude

5,000 PPH - low level

6,000 PPH - first hour of flight (climbout)

5.4.22. Reference 24. Total of references 21 and 23 or 22 and 23.

5.4.23. Reference 25. Enter the landing CG in percent of MAC.

5.4.24. Remarks Block. A/R.

5.4.25. Load adjuster number block. Leave blank.

5.5. **Crew/Passenger/Troop Drinking Water.** Each basic configuration provides for an adequate amount of drinking water. For example, a two-gallon water container will always be provided; and for missions requiring more water in accordance with table 3.1, additional containers are available. **Table 5.5.** is provided to assist in determining water quantities.

Figure 5.1. Example of DD Form 365-4

WEIGHT AND BALANCE CLEARANCE FORM F - TRANSPORT
(Use reverse for tactical missions)

FOR USE WITH T.O. 1-1B-40, NAVAIR 01-1B-40, AND TM-55-1500-342-23 | *Form Approved OMB No. 0704-0188*

DATE *(YYYYMMDD)*	AIRCRAFT TYPE	FROM	HOME STATION
20001113	HC-130P	PATRICK AFB, FL	PATRICK AFB, FL
MISSION	**SERIAL NO.**	**TO**	**PILOT**
A6D318	69-5833	PATRICK AFB, FL	MAJ LOGAN

REMARKS

TAKEOFF
OB 14.0 - 7637
IB 14.0 - 7771
AUX 5.0 - 2789
EXT 5.0 - 2756
FUS 5.0 - 2682
TOT 43000 - 23635

LANDING
OB 9000 - 4917
IB 9000 - 4999
TOT 18000 - 9916

ACL = 22215LBS

NOTE: Subtract takeoff/landing fuselage fuel from the limitations fuel block to acquire proper ACL.

LOAD ADJUSTER NUMBER

REF	ITEM	WEIGHT	INDEX OR MOM/1000
1	BASIC AIRCRAFT *(From Chart C)*	86464	4525.4
2			
3	CREW *(No.)* 6(5B/1C)	1200	23.0
4	CREW'S BAGGAGE		
5	STEWARD'S EQUIPMENT	50	1.7
6	EMERGENCY EQUIPMENT	738	4.0
7	EXTRA EQUIPMENT	1329	7.4
8			
9	OPERATING WEIGHT	89785	4564.8
10	TAKEOFF FUEL *(Gal.)*	43000	2356.5
11	WATER INJ.		
12	TOTAL AIRCRAFT WEIGHT	132785	6921.3

CORRECTION/MOST FWD/MOST AFT

13 DISTRIBUTION OF ALLOWABLE LOAD *(PAYLOAD)*

COMPT OR ARM	ITEM	CHANGES *(+ or -)* WEIGHT	CHANGES *(+ or -)* INDEX OR MOM/1000	PASSENGERS NO.	PASSENGERS WEIGHT	COMPT OR ARM	CARGO	CARGO	COMPT OR ARM
C	LM	+200	+55	3	900	557			
								950	803
TOTAL WEIGHT REMOVED		0	0						
TOTAL WEIGHT ADDED		200	55						
NET DIFFERENCE		+200	+55						

14 ZERO FUEL WT 91635
ZERO FUEL WT INDEX OR MOM 47948
ZERO FUEL % M.A.C.

LIMITATIONS	TAKEOFF	LANDING	*1* FUEL
ALLOWABLE GROSS WEIGHT	155000	155000	117000
TOTAL AIRCRAFT WT. (Ref. 12)	132785		
(Ref. 9) + (Ref. 23)		107785	
OPERATING WT. *(Ref. 9)*			89785
ALLOWABLE LOAD *(Ref. 13) (use smallest figure)*	22215	47215	27215

1 Zero Fuel or Limiting Wing Fuel

PERMISSIBLE C.G. TAKEOFF	FORWARD 22.6%	AFT 28.7%	
PERMISSIBLE C.G. LANDING	FORWARD 16.7%	AFT 29.5%	
PERMISSIBLE C.G. ZERO FUEL WT.	FORWARD	AFT	

COMPUTED BY SIGNATURE: Herb Duran,CMS,HQ ACC
WEIGHT AND BALANCE AUTHORITY SIGNATURE:
PILOT SIGNATURE: Bob M. Logan,Maj,39RQS

REF	ITEM	WEIGHT	INDEX OR MOM/1000
15	SUBTOTALS	1854	64.2
16	TAKEOFF CONDITION *(Uncorrected)*	134635	7158.3
17	TAKEOFF C.G. IN % M.A.C. OR IN		26.9%
18	CORRECTIONS *(If required)*		5.5
19	TAKEOFF CONDITION *(Corrected)*	134635	7163.8
20	TAKEOFF C.G. IN % M.A.C. OR IN		26.7%
21	ZERO FUEL WT *(Ref. 14)*	91635	4798.4
22	LESS AIR DROP LOAD	1850	64.2
	ADJUSTED ZFW/ZFM	89785	4564.8
23	ESTIMATED LANDING FUEL	18000	991.6
24	ESTIMATED LANDING CONDITION	107785	5556.4
25	ESTIMATED LANDING C.G. IN % M.A.C. OR IN		22.9%

DD FORM 365-4, AUG 96 (EG) PREVIOUS EDITION MAY BE USED.

Table 5.1. Limiting Wing Fuel Table (Primary Fuel)

1. These tables may be used to determine the maximum limiting wing fuel ACL for a given fuel load when in primary or secondary fuel management. Table weights are expressed in thousands. For fuel weights between table weights, go to nearest fuel weight to determine base weight. When using this chart, round off takeoff and landing fuel to the lowest thousand pounds, subtract the remaining fuel from the charted base weight to arrive at the corrected base weight. The following example is provided:

Takeoff fuel is 25,800 pounds, round off fuel to 25,000, at 25,000 pounds of fuel chart base weight is 130,000 subtract remaining fuel, 800 lbs, corrected base fuel weight is 129,200 lbs.

Use this procedure for both takeoff and landing fuel. Enter the most restrictive weight in the fuel block in the limitations column.

NOTE: This chart may be used under normal operations. If for any reason the aircraft is restricted, then the appropriate charts in T.O. 1C-130X-1, section V, must be used to determine ACL.

NOTE: The following fuel loading will satisfy the minimum requirements for primary fuel management. Outboard main tanks, 7,500 pounds each. Inboard main tanks 6,900 pounds each. Any additional fuel required will be put in the auxiliary and pylon tanks. Outboard main tanks must contain 500 to 1,000 pounds more fuel per tank than inboard main tanks.

2. Both takeoff and landing conditions must be calculated. The most restrictive will be used on the Form F.

TOTAL FUEL	BASE WEIGHT	TOTAL FUEL	BASE WEIGHT	TOTAL FUEL	BASE WEIGHT
8	125	26	129	44	111
9	125.5	27	128	45	110
10	126	28	127	46	109
11	126.5	29	126	47	108
12	127	30	125	48	107
13	127.5	31	124	49	106
14	128	32	123	50	105
15	128	33	122	51	104
16	128.5	34	121	52	103
17	129	35	120	53	102
18	129	36	119	54	101
19	129.5	37	118	55	100
20	130	38	117	56	99
21	130	39	116	57	98
22	130	40	115	58	97
23	130	41	114	59	96
24	130	42	113	60	95
25	130	43	112		

Instructions for Primary:

1. Determine total takeoff and landing fuel (excluding fuselage fuel.)
2. Find base weight in table.
3. Enter base weight on DD Form 365-4 limitations column under fuel.
4. Subtract operating weight to find ACL.

Table 5.2. Limiting Wing Fuel Table (Secondary Fuel)

MAIN TANK FUEL (OB + IB)	BASE WEIGHT	MAIN TANK FUEL (OB + IB)	BASE WEIGHT
8	133	21	151
9	134.5	22	152
10	136	23	153
11	137.5	24	154
12	139	25	155
13	140.5	26	155
14	142	27	155
15	143	28	155
16	144.5	29	155
17	146	30	155
18	147.5	31	155
19	149	32	155
20	150	33	155

Instructions for Secondary:

1. Determine main tank (OB + IB) fuel for takeoff and landing.
2. Find base weight.
3. Subtract total fuel (excluding fuselage fuel) from base weight to find adjusted base weight.
4. Enter adjusted base weight on DD Form 365-4 limitations column under fuel.
5. Subtract operating weight to determine ACL.

Table 5.3. Crew Weight and Moment Table.

(The figure below may be used for Form F, Reference 3)

NUMBER OF CREW	LOCATION	WEIGHT	MOMENT/1000
4	B	800	130
4	3B-1C	800	145
5	B	1000	175
5	4B-1C	1000	186
6	5B-1C	1200	230
6	4B-2C	1200	241
7	5B-2C	1400	286
7	4B-2C--1E	1400	315
8	5B-2C-1E	1600	359
8	5B-2C-1J	1600	417
9	5B-2C-2E	1800	433
9	5B-2C-2J	1800	548
10	5B-2C-3E	2000	507
10	5B-2C-1E-2J	2000	621
11	5B-2C-3E-1F	2200	593
11	5B-2C-2E-2J	2200	695
12	5B-2C-3E-1F-1J	2400	724
12	5B-2C-3E-2J	2400	769
13	5B-2C-3E-1F-2J	2600	855
14	5B-2C-3E-1F-3J	2800	986
15	5B-2C-3E-1F-4J	3000	1117
16	5B-2C-3E-1F-5J	3200	1248
17	5B-2C-3E-1F-6J	3400	1379

Table 5.4. Loadmaster Drop Kit Contents

(The figure below lists the Minimum Requirements)

Equipment	Quantity
Anchor Cable Stops	2
Carabiners, Locking	2
Cargo Sling, A7A (4 straps each)	2
Chemlights (various colors)	12/1 Box
Cord, Type III Nylon (550 cord)	50 feet
Knife	1
Message Streamers	3
Pliers, Straight Nose	1 Pair
Pyro Lanyards	2
Rubber (Retainer) Bands	1 Box
Salt, Table (or tablets)	1 Container
Screwdriver, Common	1
Screwdriver, Phillips	1
Seals (copper wire/plastic)	25
Snap Hook	12
String, 80 lb. Tape	1 roll
String, Ticket no. 5 Cotton	1 spool
Tape, Masking (1 inch wide)	1 roll

Table 5.5.

Minimum Passenger Drinking Water Quantity (Gallons) by Flight Time

A	B	C	D
Number of Personnel	**6 Hrs or Less**	**6 to 9 Hrs**	**9 to 12 Hrs**
20	5	5	5
25	5	5	7
30	5	6	8
35	5	7	9
40	5	8	10
45	6	9	12
50	7	10	13
55	7	11	14
60	8	12	15
65	9	13	17
70	9	14	18
75	10	14	19
80	10	15	20
85	11	16	22
90	12	17	23

ROBERT H. FOGLESONG, Lt General, USAF
DCS/Air and Space Operations

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 11-301, *Aircrew Life Support Program*
T.O. 1C-130(H)H-1, *Flight Manual HC-130P*
T.O. 1C-130(H)N-1, *Flight Manual HC-130N*
T.O. 1C-130(H)H-5, *Handbook, Basic Weight Checklist and Loading Data*
T.O. 1C-130A-9, *Cargo Loading Data*
T.O. 1-1B-40, *Weight and Balance Data*
T.O. 1-1B-50, *Weight and Balance*
T.O. 1C-1-71, *Listing of Cargo Tiedown Equipment Authorized for All Series Cargo*
T.O. 00-20-5, *Aerospace Vehicle Inspection and Documentation*
T.O. l C-130A-131, *Protection Armor Systems*
T.O. 1 1A10-24-7, *Storage and Maintenance Procedures – Flares*
T.O. 1 1A10-25-7, *Storage and Maintenance Procedures – Pyro Markers*
T.O. 1.1A10-26-7, *Storage and Maintenance Procedures – Pyrotechnic Signals*
T.O. 14S-1-102, *USAF Flotation Equipment*

References

A – Alert
AC – Aircraft Commander
ACL – Allowable Cabin Load
AE – Aeromedical Evacuation
AF – Air Force
AFI – Air Force Instruction
ATV – All Terrain Vehicles
CDS – Container Delivery System
CG – Center of Gravity
DIRMOBFOR – Director Mobility Forces
IAW – In Accordance With
ICAO – International Civil Aviation Organization
MAC – Mean Aerodynamic Chord
P – Passenger
RAMZ – Rigging Alternate Method Zodiac
ZFW/M – Zero Fuel Weight/Moment